Reply to Office Action dated September 25, 2003

**Amendment to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

Claim 1 (Currently Amended): A reluctance electric machine comprising:

(a) a stator part with stator teeth of magnetically conductive material that are

provided with coil windings;

(b) a rotor part arranged coaxially with respect to the stator part and located

opposite the stator part so as to leave free an air gap therebetween, the rotor part having

a number of discrete poles of magnetically conductive material that project in the

direction towards the stator part;

(c) a-annular components mounted on the stator part with two legs disposed

on sides of the stator teeth forming channels between the legs and the stator teeth for

channelizing coolant flow at least for partial sections of the coil windings of the stator

part;

(d) a sealing layer on the stator part facing the air gap and extending between

the legs of the annular component, the sealing layer comprising a first layer for fulfilling

the sealing function and a second layer for taking up the forces acting on the sealing

layer; and

2

U.S. Application No. 10/069,003 Amdt Dated January 26, 2004

Reply to Office Action dated September 25, 2003

(e) a liquid cooling medium for flow in the channel.

Claims 2-3 (Previously Canceled)

Claims 4-5 (Canceled)

Claim 6 (Previously Amended): A reluctance electric machine according to claim 1,

wherein the stator teeth have internal flow passages for the cooling medium.

Claim 7 (Previously Amended): A reluctance electric machine according to claim 1,

wherein the stator part and the rotor part with its rotor poles are coaxial and the stator

part has a smaller diameter than the rotor part with its rotor poles.

Claim 8 (Previously Amended): A reluctance electric machine according to claim 1,

wherein the stator part with its stator teeth and the rotor part are coaxial and the stator

part with its stator teeth has a larger diameter than the rotor part.

Claim 9 (Previously Amended): A reluctance electric machine according to claim 1,

further comprising at least one rib on the inner circumferential area of the stator part, on

the side directed away from the rotor part, for increasing the heat dissipation.

3

U.S. Application No. 10/069,003 Amdt Dated January 26, 2004

Reply to Office Action dated September 25, 2003

Claim 10 (Previously Amended): A reluctance electric machine according to claim 1,

wherein the coil windings, in the winding head portions located on the face side of the

stator teeth, are formed with flow passages for the cooling medium that are left free

between coil winding conductors.

Claim 11 (Previously Amended): A reluctance electric machine according to claims 1,

wherein the coil windings of the stator part comprise individual coils that are not

interlinked with respect to the magnetic flux.

Claim 12 (Previously Amended): A reluctance electric machine according to claim 1,

further comprising a first, internal cooling circuit for circulating the cooling medium and

a second, external cooling circuit for circulating another cooling medium, the external

cooling circuit being connected to the internal cooling circuit via a heat exchanger.

Claim 13 (Original): A reluctance electric machine according to claim 12, further

comprising a circulation pump coupled to the internal cooling circuit.

4

U.S. Application No. 10/069,003 Amdt Dated January 26, 2004 Reply to Office Action dated September 25, 2003

Claim 14 (Previously Amended): A reluctance electric machine according to claim 12, wherein the internal cooling circuit and the heat exchanger are integrated in a common space on the reluctance electric machine.

Claim 15 (New): A reluctance electric machine according to claim 1, wherein the annular component is comprised of a plastic material.